Amendments to and Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method for treating a patient with erectile dysfunction, comprising:

providing at least one stimulator having at least two electrodes;

implanting the at least one stimulator in or near a spinal segment responsible for erectile response;

providing operating power to the at least one stimulator;

providing stimulation parameters to the at least one stimulator;

providing a sensor to sense a condition;

using the sensed condition to adjust the stimulation parameters;

generating stimulation pulses in accordance with the stimulation parameters; and

delivering the stimulation pulses to nerves and tissue adjacent to the at least two electrodes;

wherein the stimulator has a size and shape suitable for placement through a hypodermic tube or similar sized cannula, and

wherein the stimulator has a size and shape suitable for placement in or near the spinal segment.

Claim 2 (original): The method of Claim 1 wherein the spinal segment comprises at least one of T10, T11, T12, L1, L2, L3, L4, S1, S2, S3, S4, and S5.

Claim 3 (original): The method of Claim 1 wherein the stimulation pulses comprise electrical pulses delivered at less than about 100 Hz.

Claim 4 (original): The method of Claim 3 wherein the spinal segment comprises at least one of S1, S2, S3, S4, and S5.

Claim 5 (original): The method of Claim 4 wherein the stimulator is implanted in or adjacent to the ventral root of the spinal segment.

Claim 6 (original): The method of Claim 1 wherein the stimulation pulses comprise electrical pulses delivered at greater than about 100 Hz.

Claim 7 (original): The method of Claim 6 wherein the spinal segment comprises at least one of T10, T11, T12, L1, L2, L3, and L4.

Claim 8 (original): The method of Claim 7 wherein the stimulator is implanted in or adjacent to at least one of the mediolateral column of the spinal segment, a ventral root of the spinal segment, and a sympathetic ganglion of the spinal segment.

Claim 9 (canceled)

Claim 10 (currently amended): The method of Claim **[[9]]** 1 wherein the sensor is provided within the stimulator.

Claim 11 (currently amended): The method of Claim **[[9]]** 1 wherein the sensor is independent of the stimulator.

Claims 12 and 13 (canceled)

Claim 14 (currently amended): ~~The method of Claim 13 further comprising~~ A method of treating patients with erectile dysfunction, comprising:

implanting at least one system control unit in the body of the patient, wherein the unit controls the delivery of at least one predetermined stimulus to at least one spinal segment responsible for erectile response;

sensing a condition and using the sensed condition to automatically determine the stimulus to apply;

applying the at least one predetermined stimulus to at least one spinal segment, while maintaining the posterior roots of the at least one spinal segment intact, in order to at least in part alleviate symptoms of the erectile dysfunction of the patient being treated,

wherein the at least one spinal segment is selected from at least one of the spinal segments T10, T11, T12, L1, L2, L3, L4, S1, S2, S3, S4, and S5.

Claim 15 (currently amended): The method of Claim [[13]] 14 wherein the system control unit is connected to at least two electrodes, and wherein applying the at least one predetermined stimulus comprises applying electrical stimulation delivered via the at least two electrodes.

Claim 16 (original): The method of Claim 15 wherein applying electrical stimulation comprises generating and delivering stimulation pulses at less than about 100 Hz.

Claim 17 (original): The method of Claim 16 wherein the spinal segment comprises at least one of S1, S2, S3, S4, and S5 and wherein the stimulation is applied to initiate erection.

Claim 18 (original): The method of Claim 14 wherein one or more electrodes of the stimulator are implanted in or adjacent to the ventral root of the spinal segment.

Claim 19 (original): The method of Claim 16 wherein the spinal segment comprises at least one of T10, T11, T12, L1, L2, L3, and L4 and wherein the stimulation is applied to initiate emission or ejaculation.

Claim 20 (original): The method of Claim 19 wherein one or more electrodes of the stimulator are implanted in or adjacent to at least one of the mediolateral nucleus of the spinal segment, the ventral root of the spinal segment, and a sympathetic ganglion of the spinal segment.

Claim 21 (original): The method of Claim 15 wherein applying electrical stimulation comprises generating and delivering stimulation pulses at greater than about 100 Hz.

Claim 22 (original): The method of Claim 21 wherein the spinal segment comprises at least one of T10, T11, T12, L1, L2, L3, and L4 and wherein the stimulation is applied to inhibit sympathetic input that retards erection.

Claim 23 (original): The method of Claim 22 wherein one or more electrodes of the stimulator are implanted in or adjacent to at least one of the mediolateral column of the spinal segment, a ventral root of the spinal segment, and a sympathetic ganglion of the spinal segment.

Claim 24 (original): The method of Claim 21 wherein the spinal segment comprises at least one of S1, S2, S3, S4, and S5 and wherein the stimulation is applied to inhibit parasympathetic input that retards emission and ejaculation.

Claim 25 (currently amended): ~~The method of Claim 13~~ A method of treating patients with erectile dysfunction, comprising:

implanting at least one system control unit in the body of the patient, wherein the unit controls the delivery of at least one predetermined stimulus to at least one spinal segment responsible for erectile response;

applying the at least one predetermined stimulus to at least one spinal segment, while maintaining the posterior roots of the at least one spinal segment intact, in order to at least in part alleviate symptoms of the erectile dysfunction of the patient being treated,

wherein the at least one spinal segment is selected from at least one of the spinal segments T10, T11, T12, L1, L2, L3, L4, S1, S2, S3, S4, and S5;

wherein the system control unit is connected to at least one catheter, and wherein applying the at least one predetermined stimulus comprises applying chemical stimulation via one or more stimulating drugs delivered through the at least one catheter.

Claim 26 (original): The method of Claim 25 wherein the distal end of the at least one catheter is applied to a sympathetic ganglia of the at least one spinal segment and wherein the stimulating drug is applied to inhibit sympathetic input that retards erection.

Claim 27 (original): The method of Claim 26 wherein the stimulating drug comprises one or more of an adrenergic receptor antagonist and a GABA agonist.

Claim 28 (original): The method of Claim 25 wherein the distal end of the at least one catheter is applied to a sympathetic ganglia of the at least one spinal segment and wherein the stimulating drug is applied to excite sympathetic input that initiates emission or ejaculation.

Claim 29 (original): The method of Claim 28 wherein the stimulating drug comprises one or more of an adrenergic receptor agonist and a GABA antagonist.

Claim 30 (currently amended): The method of Claim **[[13]]** 25 wherein the system control unit is connected to at least two electrodes and to the at least one catheter, and wherein applying the at least one predetermined stimulus comprises applying both electrical stimulation delivered via the at least two electrodes and chemical stimulation via one or more stimulating drugs delivered through the at least one catheter.

Claim 31 (canceled)

Claim 32 (currently amended): ~~The method of Claim 31 further comprising~~ A method of treating patients with erectile dysfunction, comprising:

implanting at least one system control unit in the body of the patient, wherein the unit controls the delivery of at least one predetermined stimulus to at least one spinal segment responsible for erectile response;

sensing a condition and using the sensed condition to automatically determine the stimulus to apply;

applying the at least one predetermined stimulus through the dura to at least one spinal segment in order to at least in part alleviate symptoms of the erectile dysfunction of the patient being treated,

wherein the at least one spinal segment is selected from at least one of the spinal segments T10, T11, T12, L1, L2, L3, L4, S1, S2, S3, S4, and S5.

Claim 33 (currently amended): The method of Claim [[31]] 32 wherein the system control unit is connected to at least two electrodes, and wherein applying the at least one predetermined stimulus comprises applying electrical stimulation delivered via the at least two electrodes.

Claim 34 (original): The method of Claim 33 wherein applying electrical stimulation comprises generating and delivering stimulation pulses at less than about 100 Hz.

Claim 35 (original): The method of Claim 34 wherein the spinal segment comprises at least one of S1, S2, S3, S4, and S5 and wherein the stimulation is applied to initiate erection.

Claim 36 (original): The method of Claim 32 wherein one or more electrodes of the stimulator are implanted adjacent to the ventral root of the spinal segment.

Claim 37 (original): The method of Claim 34 wherein the spinal segment comprises at least one of T10, T11, T12, L1, L2, L3, and L4 and wherein the stimulation is applied to initiate emission or ejaculation.

Claim 38 (original): The method of Claim 37 wherein one or more electrodes of the stimulator are implanted in or adjacent to at least one of the mediolateral nucleus of the spinal segment, the ventral root of the spinal segment, and a sympathetic ganglion of the spinal segment.

Claim 39 (original): The method of Claim 33 wherein applying electrical stimulation comprises generating and delivering stimulation pulses at greater than about 100 Hz.

Claim 40 (original): The method of Claim 39 wherein the spinal segment comprises at least one of T10, T11, T12, L1, L2, L3, and L4 and wherein the stimulation is applied to inhibit sympathetic input that retards erection.

Claim 41 (original): The method of Claim 40 wherein one or more electrodes of the stimulator are implanted in or adjacent to at least one of the mediolateral column of the spinal segment, a ventral root of the spinal segment, and a sympathetic ganglion of the spinal segment.

Claim 42 (original): The method of Claim 39 wherein the spinal segment comprises at least one of S1, S2, S3, S4, and S5 and wherein the stimulation is applied to inhibit parasympathetic input that retards emission and ejaculation.

Claim 43 (currently amended): ~~The method of Claim 31~~ A method of treating patients with erectile dysfunction, comprising:

implanting at least one system control unit in the body of the patient, wherein the unit controls the delivery of at least one predetermined stimulus to at least one spinal segment responsible for erectile response;

applying the at least one predetermined stimulus through the dura to at least one spinal segment in order to at least in part alleviate symptoms of the erectile dysfunction of the patient being treated,

wherein the at least one spinal segment is selected from at least one of the spinal segments T10, T11, T12, L1, L2, L3, L4, S1, S2, S3, S4, and S5;

wherein the system control unit is connected to at least one catheter, and wherein applying the at least one predetermined stimulus comprises applying chemical stimulation via one or more stimulating drugs delivered through the at least one catheter.

Claim 44 (original): The method of Claim 43 wherein the distal end of the at least one catheter is applied to a sympathetic ganglia of the at least one spinal segment and wherein the stimulating drug is applied to inhibit sympathetic input that retards erection.

Claim 45 (original): The method of Claim 44 wherein the stimulating drug comprises one or more of an adrenergic receptor antagonist and a GABA agonist.

Claim 46 (original): The method of Claim 43 wherein the distal end of the at least one catheter is applied to a sympathetic ganglia of the at least one spinal segment and wherein the stimulating drug is applied to excite sympathetic input that initiates emission or ejaculation.

Claim 47 (original): The method of Claim 46 wherein the stimulating drug comprises one or more of an adrenergic receptor agonist and a GABA antagonist.

Claim 48 (currently amended): The method of Claim **[[31]]** 43 wherein the system control unit is connected to at least two electrodes and to the at least one catheter, and wherein applying the at least one predetermined stimulus comprises applying both electrical stimulation delivered via the at least two electrodes and chemical stimulation via one or more stimulating drugs delivered through the at least one catheter.